

Jordan University of Science and Technology
Faculty of Agriculture
Department of Nutrition and Food Technology
First Semester 2022/2023
Course Specifications

Title & Instructor	
Course Title	Fruits and Vegetables Processing
Course Number	NF 376
Prerequisites	NF 375
Course Website	
Instructor	Prof. Taha Rababah
Office Location	
Office Phone	
Office Hours	To be determined and by appointment
E-mail	
Teaching Assistant	To be announced

Course Description	
The preparatory steps for processing of fruits and vegetables such as grading, transportation, and storage. Methods of processing such as drying, freezing, fermentation, concentration, evaporation, and canning. Testing for quality; factors affecting quality of processed fruits and vegetables.	
Learning Outcomes	Weights
The important basic concepts of Fruits and vegetable packaging	20%
The unit operations used in Fruits and vegetables	20%
The principles of food preservations	20%
The source and variability of raw food material and how it affects various food processing operations during processing steps	20%
The extent to which specific processing methods preserve foods by inactivation or destruction of enzymes and microorganisms	20 %

Text Book & References	
Title	Fruit and vegetable processing
Author(s)	Mircea Enachescu Dauthy
Publisher	
Year	
Edition	
Book Website	
References	

Teaching & Learning Methods
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PowerPoint slides presented by the instructor and provided as soft and hard copies for students.
 Small group discussions and in-class activities.
 Encouraging the use of social media and communication between students to enhance the learning experience.
 In-class revision sessions and discussion in preparation for exams.

Assessment		
Assessment Type	Expected Due Date	Weight
First Exam	To be determined	30%
Second Exam	To be determined	30%
Final Exam	To be determined	40%

Course Content		
Week	Topics	ref
1	Introduction	1
2	General properties of fruit and vegetables, chemical composition and nutritional Aspects; structural features	1
3,4	Deterioration factors and their control, Enzymic changes, Chemical changes, Physical changes, Biological changes	1
4,5	Methods of reducing deterioration	1
5,6	General procedures for fruit and vegetable preservation	1
6	Auxiliary raw materials	1
7,8	Packaging materials	1
8,9,10	Fruit specific preservation technologies	1
10,11	Vegetable specific processing technologies	1
11,12,13	Quality control/quality assurance and international trade; good manufacturing practices (gmp); hygiene requirements; hazard analysis and critical control points (HACCP)	1
13,14	Fruit and vegetable processing units - general approach; preliminary study; how to invest install and operate a processing centre modular units: from farm/family to community/business level	1

Policies	
Exams	The exams will include a variety of questions, true-false, multiple choice, fill in the blanks, and essay questions.
Cheating	Plagiarism or any other form of cheating in examinations, term tests or academic

	work is subject to serious academic penalty. Cheating in examinations or tests may take the form of copying from another student or bringing unauthorized materials into the exam room (e.g., crib notes or cell phones). Exam cheating can also include exam impersonation. A student found guilty of contributing to cheating in examinations or term assignments is also subject to serious academic penalty.
Attendance	Consistent with Jordan University of Science and Technology guidelines, students absent from regularly scheduled examinations because of authorized University activities will have the opportunity to take them at an alternate time. No make-up exams will be given for unexcused absences.
Participation	Participation and discussion are encouraged for earning additional points (extra credits).
Withdraw	Consistent with Jordan University of Science and Technology guidelines